

REMARKS/DISCUSSION OF ISSUES

The Examiner's acceptance of the drawings, and acknowledgement of receipt of the claim of priority and certified copies of the priority documents is noted with appreciation.

Summary

Claims 1-4, 6-9, 11-24 and 26-28 are pending in the application. Claims 1-25 are rejected. Claims 17, 19, 20 and 25 are objected to.

Claims 1-4, 6, 7, 9, 11-14, 16, 17, 19-21 and 23 are currently amended. Claims 5, 10 and 25 are cancelled. Claims 26-28 are new.

Claims 17, 19, 20 and 25

Claim 17 is objected to in that the term 'said second layer' in line 2 lacks antecedent basis.

Claim 17 is currently amended to change its dependency from claim 16 to claim 13, thereby providing the needed antecedent basis for the term 'said second layer'. In addition, claim 1 is currently amended to provide antecedent basis for the term 'electro-optical medium' in claim 17, and claim 3 is currently amended to render its terminology consist with the changes made to amended claim 1.

Claim 19 is objected to in that the term ' Δ/d ' lacks antecedent basis because the term is not defined in the claim.

Claim 19 is currently amended to change its dependency from claim 16 to claim 18, thereby providing the needed antecedent basis for the term ' Δ/d '.

Claim 20 is objected to in that the term 'said relative cell gap variation' lacks antecedent basis.

Claim 20 is currently amended to change its dependency from claim 16 to claim 18, thereby providing the needed

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antecedent basis.

Claim 25 objected to as being in improper multiple dependent form.

Claim 25 is cancelled.

Accordingly, it is requested that the objection to claims 17, 19, 20 and 25 be withdrawn.

Claims 2, 7, 9, 11, 14 and 20

Claims 2, 7, 9, 11, 14 and 20 are rejected under 35 USC 112, second paragraph, as being indefinite for containing narrow ranges within broad ranges of limitations.

Claims 2, 7, 9, 11, 14 and 20 are currently amended to Delete the multiple ranges, and new claims 26-28 are presented. Each of claims 26-28 contains a single range encompassing a portion of the broad range of the claims upon which they depend. Support for these new claims is clearly provided by the specification and original claims, which provide multiple overlapping ranges which are encompassed by the single ranges which replace them.

Accordingly, claims 2, 7, 9, 11, 14 and 20 as amended and new claims 26-28 are definite, and it is requested that the rejection under 35 USC 112, second paragraph, be withdrawn.

Claims 1-5, 7, 8, 22 and 24

Claims 1-5, 7, 8, 22 and 24 are rejected under 35 USC 102(b) as being anticipated by Hinata (U.S. published patent application 2001/0020985 A1).

Hinata discloses a liquid crystal display (2) and input device (3) with an elastic member (4) therebetween. The input device includes a protective plate (5) having a lower elasticity than that of the elastic member (4). See, e.g., para. [0072].

The Examiner has taken the position that Hinata's elastic layer (4) is the same as Applicant's first substrate. However,

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Applicant's first substrate (12, 122) is part of the electro-optical device, not part of any input device.

In order to clarify this point, as well as to better define the invention, claim 1 is currently amended to incorporate the limitations of claims 5 and 10, and claims 5 and 10 are cancelled. Some of the limitations of claim 16 are also incorporated into claim 1. Various dependent claims are consequently currently amended to conform their dependencies according to the changes made to claims 1, 5, 10 and 16.

It is now clear that Applicant's first substrate and display substrate correspond to Hinata's layers 8a and 8b, which together with spacers 7, define the liquid crystal cell.

While Hinata discloses that layers 8a and 8b may be flexible, there is no teaching or suggestion regarding the degree of elasticity of these layers. Thus, there is no teaching or suggestion regarding the relative elasticities of these layers and any other layers of the structure.

Accordingly, claims 1-5, 7, 8, 22 and 24 are not anticipated by Hinata, and the rejection should be withdrawn.

Claim 9

Claim 9 is rejected under 35 USC 103(a) as being unpatentable over Hinata in view of Wakita et al. (U.S. 5,307,190) (herein 'Wakita').

Wakita discloses a flexible liquid crystal display panel which is bendable into a radius of curvature of 10 cm. See col. 11, line 46. This is equivalent to a radius of curvature of 100 cm. While this is smaller than 300 mm, claim 9 is patentable *inter alia* by virtue of its dependency on claim 1.

Accordingly, claim 9 is patentable over the combination of Hinata and Wakita, and the rejection should be withdrawn.

Claims 10-17, 20, 21 and 23

Claims 10-17, 20, 21 and 23 are rejected under 35 USC

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103(a) as being unpatentable over Hinata in view of Hinata et al. (U.S. patent 6,812,974 B1) (herein 'Hinata '974').

Hinata '974 discloses a device similar to that disclosed by Hinata, i.e., a liquid crystal panel (2) and an input unit (4) on top of the panel (2). In the embodiment of Fig. 5, a highly flexible supporting member (37) supports the second substrate (22b) of liquid crystal panel (2). Preferably, member (37) is more flexible than substrate (22b). See col. 12, lines 44-46.

Thus, Hinata '974 teaches that the outer layer (37) should be more flexible than the inner layer (22b), i.e., the layer next to the liquid crystal cell (32).

This is the opposite situation from that called for by Applicant's claims 1 and 13, i.e., the inner layer (first and second layers 124 and 126) is more elastic than the outer layer (first substrate 122 and display substrate 128).

Thus, Hinata '974 actually leads the skilled artisan away from the claimed invention.

Accordingly, Claims 10-17, 20, 21 and 23 are patentable over the combination of Hinata and Hinata '974, and the rejection should be withdrawn.

Claims 18 and 19

Claims 18 and 19 are rejected under 35 USC 103(a) as being unpatentable over Hinata in view of Hinata '974, and further in view of Wakita.

Of the three applied references, only Hinata '974 mentions changes in the cell gap, and specifically addresses changes in the cell gap caused by deflection of the input unit.

However, Hinata does not teach or suggest that his flat panel display can be bent into a curvature while maintaining a relative variation of cell gap equal to or smaller than 5%, as called for by claim 18, or while satisfying the relationship

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set forth in claim 19.

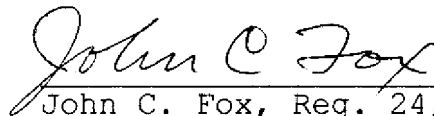
Moreover, even if Hinata did make such a teaching or suggestion, it would not be applicable to Applicant' device, since the device structure of Hinata '974 is different than Applicant's, as already pointed out above.

Accordingly, claims 18 and 19 are patentable over the combination of Hinata, Hinata '974 and Wakita, and the rejection is in error and should be withdrawn.

Conclusion

In view of the foregoing, Applicant respectfully requests that the Examiner withdraw the objections and rejections of record, allow all of the pending claims, and find the application to be in condition for allowance.

Respectfully submitted,



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